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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/826,006 | 04/15/2004 | James R. Braig | OPTIS.084A | 9205 |
| 20995 7590 01/28/2008 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614 | | | EXAMINER RAMILLANO, LORE JANET | |
| | | | ART UNIT 1797 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/826,006

Applicant(s)

BRAIG ET AL.

Examiner

Lore Ramillano

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/6/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 1-15, 21-36, 39 and 48-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-20, 37-38, 40-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/15/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/16/08.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Election/Restrictions

1. Newly submitted claims 39 and 48-51 are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons:

New claim 39 is dependent on claim 22, which is one of the withdrawn claims in non-elected Group III.

Inventions of Group V (claims 48-50) and Group II (claims 16-20, 37, 38, 40-47) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another and materially different apparatus, such as an apparatus that does not have a device for saving information in a memory.

Inventions of Group II and Group VI (claim 51) are directed to related products. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed *are either not capable of use together or can have a materially different design, mode of operation, function, or effect because the invention of Group II does not have a computer memory, whereas, the invention of Group VI has a computer memory.* Furthermore, the

inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 39 and 48-51 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. This application contains claims 1-15 and 21-36 drawn to inventions nonelected without traverse in the reply filed on 11/6/07 (p. 16 of the reply); and claims 39 and 48-51 drawn to inventions constructively elected by original presentation for prosecution on the merits. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Status of Claims

3. Claims 16-20, 37, 38, and 40-47 are under examination.

Claim Objections

4. The objection to claim 1 is withdrawn.

Prior art rejections

5. In light of applicant's amendments, the rejections over the prior art are withdrawn. New rejections follow.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. **Claims 16-18, 38, and 40-45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (US 5714759) in view of Erickson et al. ("Erickson," US 6809807).

Nelson discloses a device comprising: an optical source configured to emit electromagnetic radiation in a range of about 4.275 to about 10.060 μm (i.e. col. 4, lines 5-14); a detector positioned with respect to the source, so that the source and the detector define an optical path (i.e. 14, fig. 1, wavelength array); a sample element configured to support a material sample in the optical path (i.e. 24, fig. 1); a first bandpass filter disposed in the optical path between the sample element and the source, the first bandpass filter being configured to allow electromagnetic radiation of a first set of previously determined values to impinge on the sample element, the first set of previously determined values associated specially with a first analyte and one or more interference to said first analyte (i.e. 74, fig. 1); and a second array of filters (i.e. 26, fig. 1, col. 5, lines 20-35) disposed in the optical path between the sample element and the source, the second array of filters being configured to allow electromagnetic radiation of a second set of previously determined values to impinge on the sample element, the second set of previously determined values associated specially with a second analyte and one or more interferences to said second analyte. (i.e. col. 3, lines 35 to col. 4, line 62).

Nelson reads the second set of previously determined values includes wavelengths selected from the group comprising: about 7.8 μm , about 8.3 μm , about 10.55 μm , about 10.7 μm , and a wavelength of about $10.55 \pm .2 \mu\text{m}$. since Nelson's device emits electromagnetic radiation in the 7-10 micrometer wavelength range (i.e. col. 4, lines 5-14).

While Nelson discloses a first bandpass filter and second array of narrow bandpass filters, Nelson does not specifically disclose having more than one array of bandpass filters. It would

have been obvious to a person of ordinary skill in the art to modify Nelson's first bandpass filter by incorporating additional filters to the first filter because it would insure that only a specified range of wavelength(s) would be detected.

In addition, it would have been obvious to rearrange the filter arrays by placing them between the sample element and the light source because it would be desirable to have a finite wavelength impinging upon the sample.

Nelson does not specifically disclose a separation device comprising a membrane (or fluid filter) and a fluid passage.

Erickson discloses in FIG. 3, a sampler 10 placed within a sampler receiving chamber 102 of the sampler-receiving end 103 of the test module 100. The sampler 10 is such as that shown in U.S. Pat. No. 5,682,233 and identified as sampler 32 in FIG. 18 of that patent. The sampler may also be as that shown as element 410 in U.S. Pat. No. 5,823,973. The sampler 10 includes a plastic body 12 with a sampling portion 14 sized to be received within chamber 102. The sampler 10 includes a needle 16 which, in a preferred embodiment, is sized to penetrate into but not through a patient's dermis in order to collect a sample of substantially blood-free interstitial fluid in a substantially pain free manner. The sampling portion 14 includes a through-hole 18. An absorbent membrane 20 is placed over the hole 18. The needle 16 is positioned to deposit the collected sample onto the membrane 20 with the deposited fluid evenly distributed over the membrane 20. As more fully disclosed in U.S. Pat. No. 5,823,973, the needle 16 and membrane 20 are mutually positioned for the membrane 20 to act as a filter. The generally central test area of the membrane 20 is conveniently referred to herein as a target area T.

It would have been obvious to a person of ordinary skill in the art to modify Nelson by incorporating a separation device comprising a membrane (or fluid filter) and a fluid passage because Nelson anticipates that his device can be used to conduct multiple analyses of samples, which can be in the gas or liquid form (i.e. col. 1, lines 5-20). In addition, it would be desirable to include a separation device comprising a membrane (or fluid filter) because it would insure that the test results are accurate (i.e. col. 3, lines 44-61). It would be desirable to include a fluid passage in the separation device because it would be time and cost efficient to have the sample initially directed to the membrane to allow it to be quickly filtered and analyzed.

8. **Claims 19-20 and 46-47** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson in view of Erickson, as applies to claims 16-18, 38, and 40-45 above, and further in view of Chang et al. ("Chang," US 5611004).

Nelson in view of Erickson does not disclose having an array of filters comprising an electronically tunable optical filter.

Change discloses in FIG. 1, an integrated AOTF is fabricated in an elongated crystalline substrate 11 such as lithium niobate (LiNbO₃). An optical waveguide 13 is formed in an upper surface of the substrate, for example by diffusion of titanium. A beam of light is coupled into the waveguide 13 through an input optical fiber 17. The light propagates through the waveguide and out through an output optical fiber 19. A surface acoustic wave is induced in the waveguide by an interdigitated transducer 21. The transducer is driven by an externally-generated electrical signal from a signal source 22. The frequency of the acoustic wave is determined by the frequency of the electrical signal. (i.e. col. 1, lines 32-43).

It would have been obvious to a person of ordinary skill in the art to modify the modified Nelson by incorporating an electronically tunable optical filter in one or both filter arrays because it would be desirable to have a filter system that electronically changes wavelengths to emit only selected optical frequencies (i.e. Chang, col. 1, lines 14-30).

9. **Claim 37** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson in view of Erickson, as applies to claims 16-18, 38, and 40-45 above, and further in view of Liu et al. ("Liu," US 6388750).

Modified Nelson does not specifically disclose a filter wheel. Liu discloses in FIG. 3, a first detector 54a that utilizes a filter wheel 72 in addition to a photodiode 55 to perform the screening test. The filter wheel 72 includes a rotating wheel 74 with different bandpass filters 76 secured thereto. The filter wheel 72 is rotated so that the information collected by the first collector 60a passes through multiple different filters 76 to the photodiode 55. The bandpass filters 76 provide spectral discrimination of the information transferred to the photodiode 55. (i.e. col. 9, lines 5-13).

It would have been obvious to a person of ordinary skill in the art to modify the modified Nelson by substituting his filter assemblies for a color wheel comprising different arrays of bandpass filters because it would be desirable to have multiple different wavelengths of light impinging upon the sample.

Response to Arguments

10. Applicant's arguments with respect to claims 16-20 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lore Ramillano whose telephone number is (571) 272-7420. The examiner can normally be reached on Mon. to Fri.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the

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Lore Ramillano
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Art Unit 1797


Jill Warden
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